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Phenomena of Jupiter's Satellites.

Day of Observation. 1863.	Satellite.	Phenomenon.	Mean Solar Time. h m s	Observer.
April 1	II	Eclipse, disapp.	12 18 35·7	E.
20	III	Ingress, bisection	14 14 42·7	E.
26	II	Eclipse, reapp.	11 51 25·5	C.
28	I	,, reapp.	11 6 45·3	E.
May 1	III	,, reapp.	11 26 4·9	R.
8	III	Occ. disapp. last cont.	10 39 53·4	N.
,,	III	Occ. reapp. last cont.	13 1 37·6	R.
,,	III	Eclipse, disapp.	13 3 52·3	R.
21	I	,, reapp.	11 17 34·9	E.
26	III	Egress, last cont.	9 30 59·6	C.
28	II	Eclipse, reapp. (*a*)	11 37 10·5	J. C.

(*a*) Probably late, the planet being very faint from cloud.

The initials E., C., J. C., R., and N., are respectively those of Mr. Ellis, Mr. Criswick, Mr. Carpenter, Mr. Roberts, and Mr. Nash.

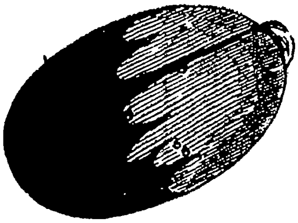

Fig. 1.

Plato Sunrise. Rev. W. R. Dawes, 1863, April 26^{d} 1^{h} ±. Degree of illumination 0·03.

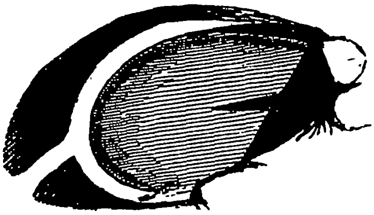

Fig. 2.

Plato Sunset. W. R. Birt, 1863, May 10^{d} 15^{h} 56^{m}. Degree of illumination 0·99.

Fig. 1 is intended to illustrate Mr. Dawes' paper on *Plato*, inserted in the last number of the *Monthly Notices*. The four crater spots on the floor are shown in the engraving. Fig. 2 exhibits the appearance of *Plato* at sunset, or more accurately within three hours of the sun setting in the western edge of *Plato*. Both sketches were taken during the same lunation, April and May, 1863.

Observation of a Solar Facula. By Capt. W. Noble.

While examining the Sun on the 24th of May, at 3^{h}, G.M.T., my attention was directed to a spot which was

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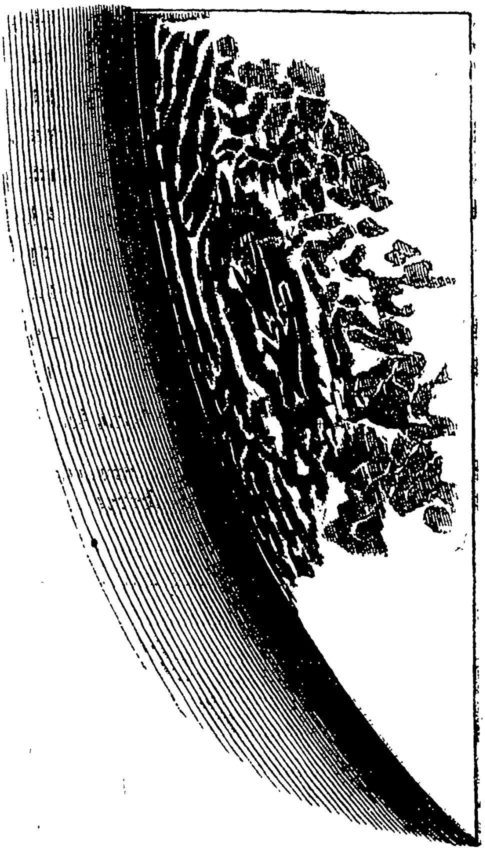
just coming on to his following limb. Upon scrutinising the neighbourhood of this spot, I was at once attracted by the remarkable appearance presented by a facula situated between the spot referred to and the limb itself; an appearance depicted in the accompanying sketch. It was that



Part of the Sun's Limb, Sunday, May 24th, 1863. 3^h, G.M.T.

of a most extraordinary elevation above the general level of the Sun's apparent surface, the facula exhibiting quite a dark line on its following edge, and presenting a perfectly stereoscopic effect. My first impression was that this was an optical illusion, and that what I took for the shading on the following side of this enormous ridge of light was really a spot or macula excessively foreshortened. Upon looking at the Sun, however, when this supposititious spot *should* have arrived fairly on to his disk by his rotation, I found the neighbourhood a perfect blank, the spot, following which I had first observed the facula, being quite isolated. The drawing which I send was made, *ad naturam*, with a power of 154. Owing to the employment of a "Hodgson" eye-piece, a double reversal of the image has necessarily taken place. I have marked the facula *a*. The extreme length of the penumbra of the spot to the right of it, was as nearly as possible 0′·8 of arc, which will supply the scale to which the sketch was made.

Forest Lodge, Maresfield, Sussex,
June, 1863.

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